

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 to 36. (Canceled)

Claim 37. (New) A method for obtaining seismic data comprising the steps of:

translating a constellation of seismic energy sources along a survey path, the seismic energy sources including a reference energy source and at least one satellite energy source;

translating along the survey path a streamer of spaced apart receivers, wherein the receivers are disposed generally in a linear alignment along a predetermined length of the streamer;

positioning the at least one satellite energy source in a perpendicular displacement to the direction of the streamer of receivers to provide a plurality of azimuthal coverage, wherein the at least one satellite energy source is located laterally outboard from the streamer at a distance of at least one-tenth of the length of the streamer; and

activating the reference energy source and the at least one satellite energy source at a time delay relative to the activation of the reference energy source once each at spaced part activation locations along the survey path to generate a series of superposed wavefields which propagate through a subsurface and are reflected from and refracted through material heterogeneities in the subsurface, the time delay being varied between the spaced apart activation locations; and

recording seismic data including seismic traces generated by the series of superposed wavefields utilizing the spaced apart receivers.

- Claim 38. (New) The method of claim 37 wherein the time delay includes a constant portion which remains constant for any particular source for the duration of the seismic survey and a variable portion, which varies for each source and for each activation location.
- Claim 39. (New) The method of claim 37 wherein the streamer includes a cable and the receivers and streamer is towed by a marine vessel.
- Claim 40. (New) The method of claim 37 wherein the variable time delays range from plus to minus one-half the time taken to translate the constellation between successive activation locations.
- Claim 41. (New) The method of claim 37 wherein there is a plurality of satellite energy sources.
- Claim 42. (New) The method of claim 41 wherein the time delay is variable between each of the plurality of energy sources in the constellation at each of the activation locations.
- Claim 43. (New) The method of claim 37 for obtaining seismic data, which further includes migrating the seismic data using the time delays to image signals generated from the respective energy sources.